

# USER NOTES FOR STP EDITOR

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## AN INTRODUCTION

Anyone who has used SCREEN-TO-PLOTTER to construct graphics with the 1520 plotter undoubtedly, at times, has wanted to make revisions to a plot data code block. Before STP EDITOR, this meant laborously re-entering the entire plot command sequence, incorporating changes where necessary. With STP EDITOR, one can single step forwards and backwards through a plot data block doing plot command insertions and deletions. The whole or parts of a plot data code block can be plotted while editing to verify that edited commands are having the desired effects.

## THE PROGRAM

STP EDITOR loads in three parts and then auto-runs. The 1520 need not be connected to the 2068 to edit a code block. However, it is often desirable to plot edited sections of a code block to verify that the revised code is doing exactly what is expected. If you elect to have the plotter connected, be certain to leave the 1520 turned OFF until the program has loaded and the initial screen notifies you to turn it ON.

The first menu encountered displays these four choices:

- <L>OAD CODE - A previously assembled plot data code block can be loaded for editing by pressing the <L> key.
- <S>AVE CODE - An edited plot data code block can be given a name and saved to tape by pressing the <S> key.
- <C>ONTINUE - Upon pressing the <C> key, the m.c. part of STP EDITOR is entered. If no plot data code block has been loaded or is not already present in memory, you will be advised that there is no code to edit. Press <Q> to return to the previous menu for loading a code block, or remain with the edit menu and build a code block from scratch, in which case your first choice from the edit menu must be to <I>NSERT a command.
- <Q>UIT - Pressing <Q> will return you to BASIC and is the only exit from the error trapped editor. Type and ENTER <GOTO 40> to re-start the editor.

The main edit menu gives you these eight choices:

- <C>ONT - By repeatedly pressing the <C> key, you can single step through the plot command sequence. If the plotter is connected and has been toggled ON with the <P>LOT key (see below), the plotter will accept and execute each command as it is "single stepped".
- <D>EL. - Pressing the <D> key will delete the command that is at the bottom of the plot command list displayed on the screen.
- <I>NS. - Upon pressing the <I> key, you will be presented with a menu of plot commands to choose from for insertion. Enter command parameters to further prompts. Insertion of new plot commands will be made between the lowest plot command on the screen and the command above it. Inserted commands are executed (i.e. scrolled-up the list) immediately. The only exception to inserted command placement occurs if insertion is specified after the "END OF CODE BLOCK REACHED." notice is displayed. Insertion after the notice will result in the command being placed below the lowest plot command displayed.

## Main edit menu commands (continued):

- <E>ND CODE - You will be asked to verify your intention to press the <E> key. An affirmative answer to the verification prompt will terminate a plot data code block rendering any plot commands that may have followed inaccessible to the editor.
- <Q>UIT - Pressing <Q> will return you to the <S>AVE/<L>OAD CODE menu where you can press <S> to name and save an edited plot data code block, or, by pressing <Q> again, exit to BASIC.
- <B>ACK - Pressing <B> allows "single stepping" in reverse. No plotting is possible while back stepping - even if <P>LOT is toggled "ON".
- <T>EST - After pressing <T> you will be asked: "HOW MANY COMMANDS BACK TO START PLOTTING?" and told to ENTER "0" if you want to start at the beginning of the code block. If <P>LOT is toggled OFF, then plot commands will be scrolled on the screen beginning with the specified number of commands back. If <P>LOT is toggled ON, the plotter will execute each command as it is scrolled up the screen. Scrolling will stop at the command that was at the bottom of the list when <T>EST was selected, or if the <SPACE BAR> is pressed before scrolling is completed. Pressing the <SPACE BAR> during scrolling provides a way edit commands that are "back-up" the list.
- <P>LOT - The <P> key is a toggle allowing plot commands to be gated to the 1520. The <P> key should remain OFF if the 1520 is not connected. An unpleasant software "lock-up" is the result of trying to plot to a 1520 that is not connected (or not turned ON).....BEWARE.....!!

## Recovery response to memory usage error reports:

Before editing of a plot data code block is allowed, a check is made to see if a code block is present in memory, and if there are any errors in the code. If you should load a plot data code block and get a "DATA ERROR AT MEMORY LOC: xxxxx" report, you will have to determine which plot command number (0-7) should be POKed to the error location (see SCREEN-TO-PLOTTER documentation pgs. 3 & 4). It may be helpful to <POKE error loc , 0>, re-enter STP EDITOR by typing <GOTO 40>, and selecting <C>ONTINUE. Doing this will allow the editor to function on plot commands up to where the error occurred.

If the "MAX. PLOT DATA STORAGE REACHED" notice interrupts your editing, it means that the plot data code block has been expanded beyond it's 8192 byte memory allotment, usually due to the insertion of a large number of new plot commands. The only way to continue inserting more commands is to make room for them by deleting commands from the list. Look for and delete redundant commands to make additional memory available.

STP EDITOR's machine code was compiled w/NovelSoft's TIMACHINE.© I will provide a tape of the BASIC program that was compiled into m.c. to any previous purchaser of STP EDITOR for \$6.00 ppd.